### **NEVADA DIVISION OF ENVIRONMENTAL PROTECTION**

## FACT SHEET

(pursuant to NAC 445A.236)

**Permittee Name**: Rhodes Homes

Tuscany Hills Golf Course

20 Rhodes Ranch

Las Vegas, Nevada 89148

Permit Number: NEV2001503

# Description of Discharge

**Location**: Tuscany Hills Golf Course

901 Olivia Parkway

Henderson, Clark County, Nevada 89015

<u>Characteristics</u>: The City of Henderson Water Reclamation Facility (COHWRF) (NEV80003) supplies tertiary treated, denitrified, disinfected effluent for reuse irrigation at Tuscany Hills Golf Course. Irrigation via spray irrigation of golf course and common area turf grasses and other landscape plant materials, and drip irrigation for trees and other plant materials proximal to the golf course are situated around a master planned community. All reuse activities are conducted in accordance with the approved Effluent Management Plan and permit conditions.

<u>Flow</u>: The Permittee has applied for 1.22 MGD 30-Day Average Flow on the permit renewal and an annual limit of 1,064 acre feet per year. The permit requires the reuse water quantity to be monitored and reported by the Permittee. The maximum monthly flow is based upon the highest usage month determined from the consumptive use balance plus a 10% allowance, in accordance with the approved Effluent Management Plan.

<u>Annual Reuse Water Application Rate:</u> Volume in acre-feet to be monitored and reported with 4th Quarter Report

### Fecal Coliform:

Fecal Coliform:\* 2.2 Cfu/Mpn/100 ml 30 day average Cfu = Colony Forming Unit

23 Cfu/Mpn/100 ml daily max. Mpn = Most Probable Number

ml = Milliliter

<u>General</u>: The Permittee wishes to continue to reuse tertiary treated, denitrified and disinfected reuse effluent supplied by the City of Henderson Water Reclamation Facility. The facility provides reclaimed water that meets Category B quality per NAC 445A.276.

<sup>\*</sup> Sample results are obtained from COHWRF (# NEV80003)

The golf course slopes downhill to the north from Lake Mead Drive to within one half mile of the Las Vegas Wash (Wash). The area between Tuscany Hills Golf Course and the Wash is planned for future parkland. The Tuscany Hills Golf Course is located on the site of several former sand and gravel pit operations, lying east of Pabco Road and the City of Henderson Water Reclamation Facility. The Southern Nevada Water Authority lateral also crosses to the north of the course in an east-west direction.

Receiving Water Characteristics: Groundwater in the area varies with elevation, from approximately 5 feet to 58 feet in depth, generally exhibiting a north to northeast flow direction. There are no known productive, domestic wells in the subject reuse area; drinking water is provided by the City of Henderson municipal water system. The Las Vegas Wash is located north of the Tuscany Hills property. A stormwater channel traverses the eastern and northern margin of the property, discharging into the area Henderson plans to construct a park and trail area; an outlet to the Wash via the C-1 channel is nearly completed to carry stormwater flows. No runoff of effluent is permitted. The effluent storage lakes have HDPE liners. No adverse effects are expected to occur as a result effluent reuse. The application rate and quantities of treated effluent are strictly in accordance with the approved EMP. Over application of irrigation water, or runnoff from irrigation activities is prohibited. The shallow groundwater is known to contain several contaminants, of which perchlorate is a concern. An underdrain system was installed prior to the golf course and community development to convey any shallow groundwater that occurs in certain areas of the development, with discharges to a leachfield in an area of clay soils in the northwest portion of the golf course property. Monitoring of this leachfield is required to track groundwater levels; no discharge to the surface from the leachfield is permitted.

## Groundwater Monitoring: MW # 1,2,3 and 4

GROUNDWATER ELEVATION	Monitor & Report	Monthly	Discrete
STATIC WATER LEVEL	Monitor & Report	Monthly	Discrete
TOTAL DISSOLVED SOLIDS:	Monitor & Report	Monthly	Discrete
TOTAL NITROGEN - N:	Monitor & Report	Monthly	Discrete
NITRATE - N: Limit	s per Part I.A.3. of permit	Monthly	Discrete
TOTAL PHOSPHORUS as P:	Monitor & Report	Monthly	Discrete
PERCHLORATE:	Monitor & Report	Monthly	Discrete
INFILTRATION FIELD			

GROUNDWATER WELLS: Depth to Groundwater Monthly

Discrete

(Assign site specific numbers to each well, and monitor mg/L of each parameter)

#### **Procedures for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Las Vegas Review-Journal** and **Henderson Home News** for

publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the publication of the public notice. All comments must be received by December 15, 2007. The comment period can be extended at the discretion of the Administrator.

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A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested

agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the

person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with

NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental

Commission pursuant to NRS 445A.605.

Schedule of Compliance and Special Conditions

Any revisions to the Effluent Management Plan (EMP) shall be submitted to the Division

within 60 days of permit issuance.

Cross-Connection control documentation approved by the City of Henderson Public Works

staff shall be submitted annually in accordance with the permit.

Rationale for Permit Requirements

Required water quality parameters are monitored to ensure effluent reuse requirements are maintained per NAC 445A.275, and NAC445A.276 and groundwaters of the State are

protected.

**Proposed Determination** 

The Division has made the tentative determination to reissue the proposed permit for a

period of five (5) years.

Prepared by: Icyl C. Mulligan

September 2007